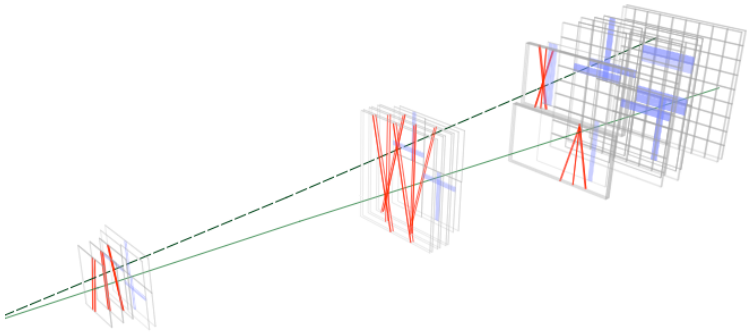
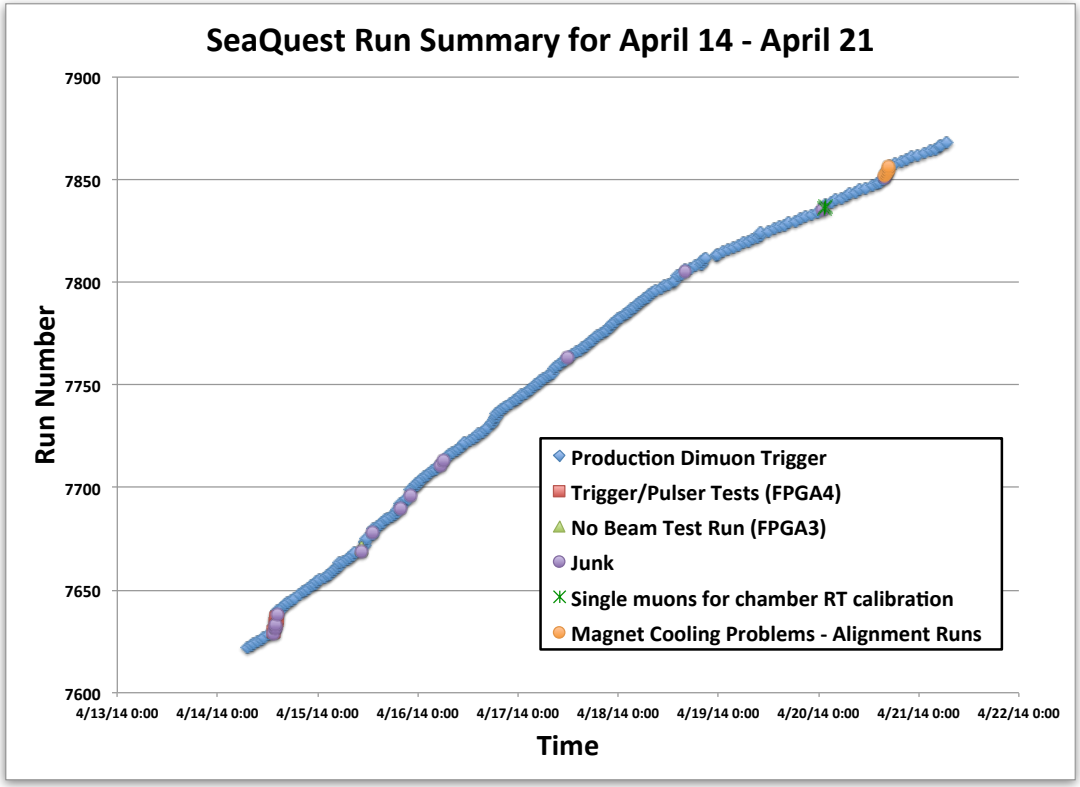
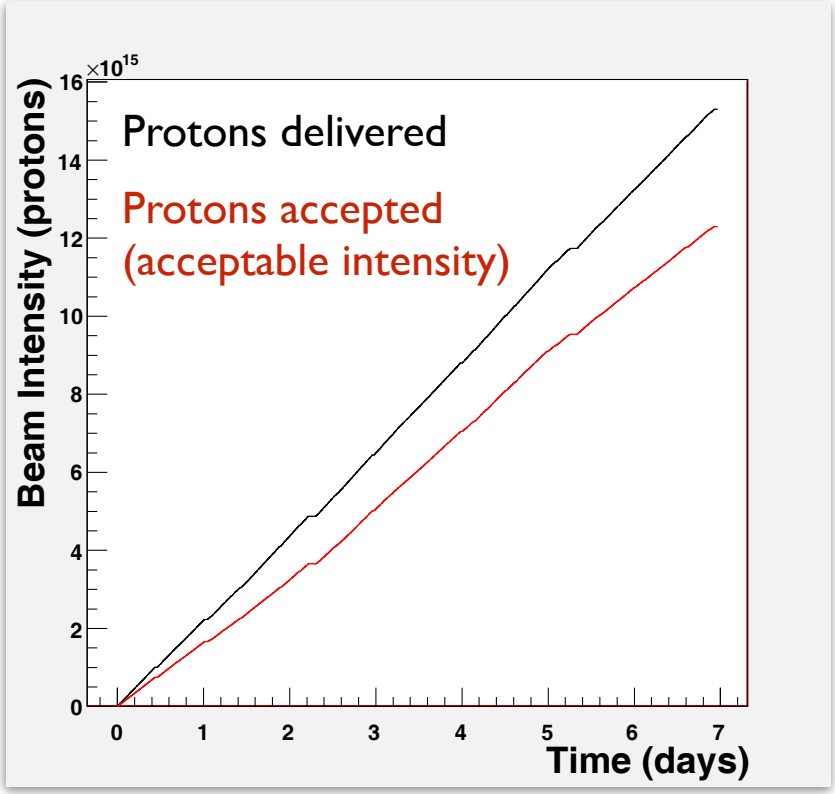
SeaQuest Status:

- All detectors operating well
  - A few amplifier cards swapped out last week to improve chamber efficiency
- Target system continues to operate reliably
- Beam-time usage last week:

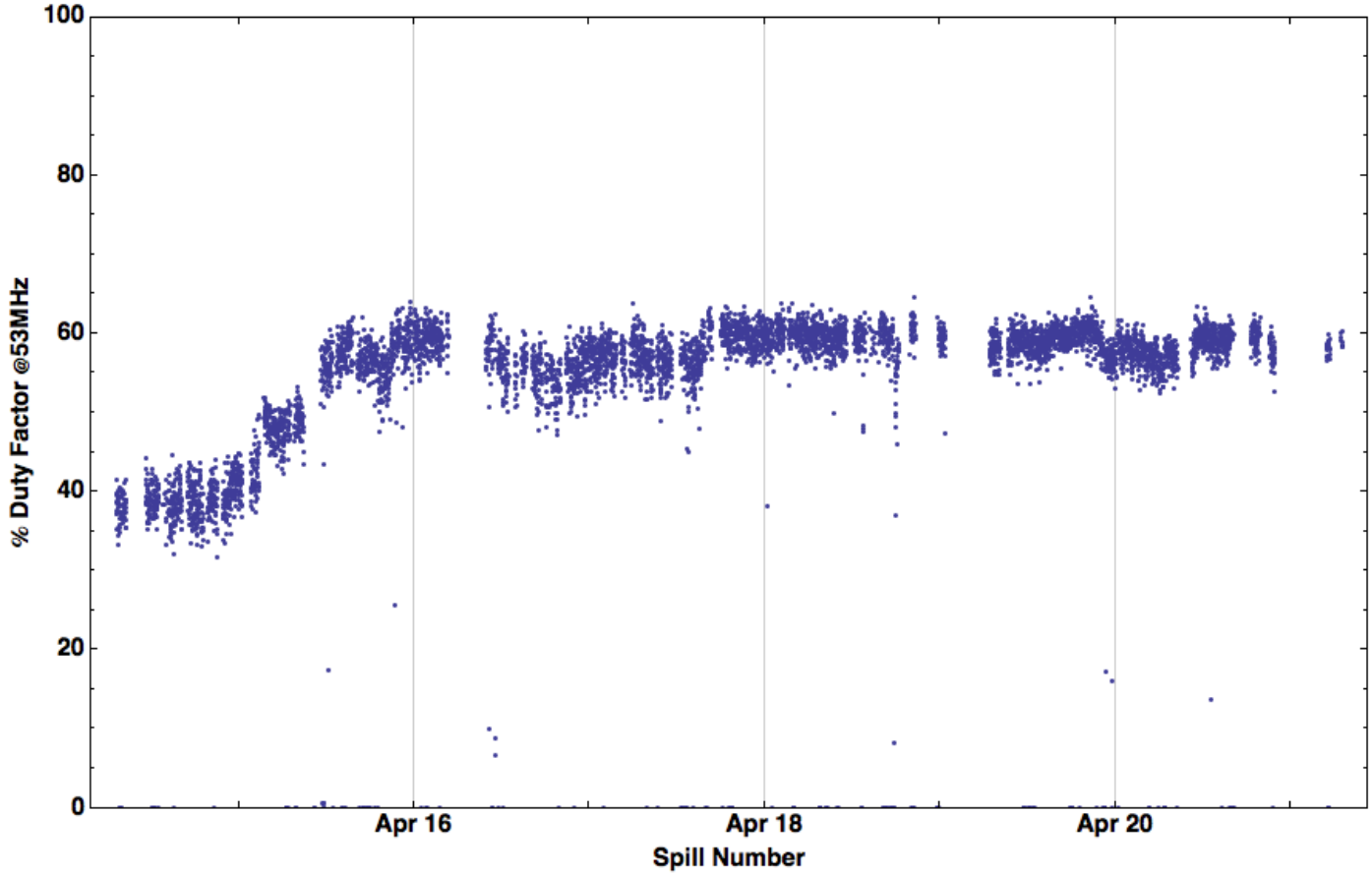






Improvements in Beam Conditions

- Accelerator adjustments significantly improve beam uniformity measured by Cherenkov monitor at full 53MHz beam RF.
- This has a sizable impact on experimental accidental



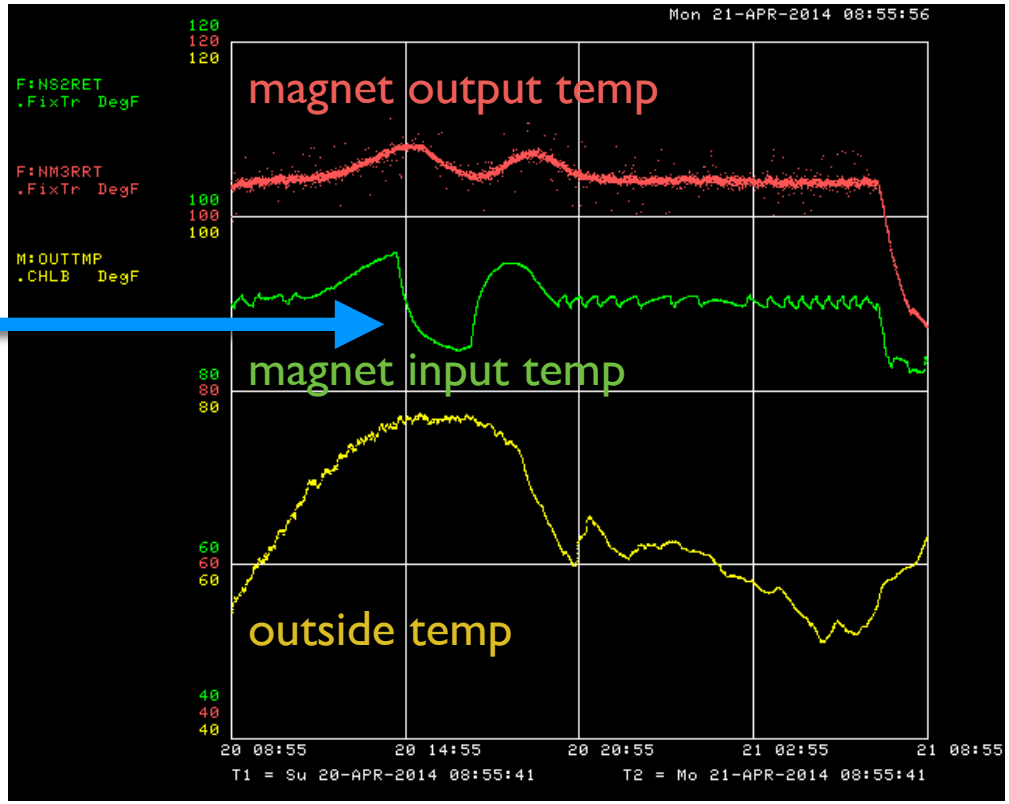
Beamline Cherenkov Monitor

- Degradation of mirror reflectivity with beam previously observed (previously replace around 5×10^{16} protons or 1 month)

- On Tuesday, a Kapton mirror with 300nm aluminum coating installed. Previous mirrors were mylar with 50nm aluminum. This will hopefully extend the mirror's life.

Magnet Cooling Issues

- Thursday noon, unexpected cooling-related trip of NM2,3,&4 power supplies. Reason not totally understood.
- Sunday 2pm, cooling water in KMAG approached alarm point. We shut off magnet and took alignment runs until the weather cooled off
- SeaQuest is currently running with one of three cooling towers. This week's shutdown will bring a second on-line; the third will follow shortly thereafter.



- **Significant interruptions last week**
  - Tuesday (4/15) 04:40- DAQ failure related to network problems (~2 hours)
  - Friday (4/18) 22:00- accelerator power glitch (~1 hour)

- Multi-day shutdown this week (started today 7am)
  - Work on cooling towers
  - Quad move - to possibly improve radiation levels
  - Improve stability of flammable gas detection system
  - Assorted short SeaQuest maintenance items